Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Previously Amended) An illuminator comprising an array of a plurality of light sources mounted in a plurality of cavities in a substrate, and an electrical drive circuit, wherein the substrate comprises an electrically insulating body plated with plural conductors for the drive circuit.

2. (Currently Amended) An illuminator as ~~claimed~~ in claim 1, wherein the electrically insulating body is of a circuit board material.

3. (Currently Amended) An illuminator as in claim 2, wherein the electrically insulating body is of ~~FR4~~ flame resistant material.

4. (Currently Amended) An illuminator as in ~~C~~claim 1, wherein the plural conductors extend into the plural cavities, whereby said plural conductors act as reflective coatings on the plural cavity walls.

5. (Currently Amended) An illuminator as ~~claimed~~ in claim 4, wherein the plural conductors extend underneath the light sources.

6. (Currently Amended) An illuminator as claimed in ~~C~~claim 1, wherein the plural light sources comprise bare semiconductor dies.

7. (Previously Amended) An illuminator comprising an array of a plurality of light sources mounted in a plurality of cavities in a substrate, an electrical drive circuit, wherein the substrate

comprises an electrically insulating body plated with plural conductors for the drive circuit, and a thermally conductive structure under the plural light sources.

8. (Currently Amended) An illuminator as ~~claimed~~ in claim 7, wherein the thermally conductive structure comprises a plurality of layers bonded to a surface of the substrate body.

9. (Currently Amended) An illuminator as ~~claimed~~ in claim 8, wherein the thermally conductive structure comprises at least one heat spreader in direct contact with a plating under a light source.

10. (Currently Amended) An illuminator as ~~claimed~~ in claim 9, wherein the heat spreader comprises a metal plating patterned onto the substrate under each cavity.

11. (Currently Amended) An illuminator as ~~claimed~~ in claim 9, wherein the heat spreader comprises a plurality of metal coatings patterned onto the substrate, one under the other.

12. (Currently Amended) An illuminator as ~~claimed~~ in ~~C~~claim 9, wherein the at least one heat spreader comprises one heat spreader per light source.

13. (Currently Amended) An illuminator as ~~claimed~~ in ~~C~~claim 7, wherein the thermally conductive structure comprises a global thermally conducting layer underneath all of the cavities.

14. (Currently Amended) An illuminator as ~~claimed~~ in claim 13, wherein said global layer comprises a resin embedded with thermally conductive particles.

15. (Currently Amended) An illuminator as ~~claimed~~ in claim 14, wherein the particles are of diamond material.

16. (Currently Amended) An illuminator as ~~claimed~~ in claim 14, wherein the particles are of a ceramic material.

16. (Currently Amended) An illuminator as ~~claimed~~ in claim 14, wherein the particles are of a ceramic material.

17. (Currently Amended) An illuminator as ~~claimed~~ in ~~C~~claim 13, wherein the thermally conductive structure further comprises a heat sink bonded to the globally conducting layer.

18. (Currently Amended) A method of producing an illuminator comprising the steps of:

providing a substrate body of insulating material,

completing a substrate by plating the body with an electrically conductive plating;

forming an array of cavities in the substrate at a top side, the cavities having a shape for desired light reflections; and

placing a light source in each cavity.

19. (Currently Amended) A method as ~~claimed~~ in claim 24, wherein the plating of the substrate is patterned after the cavity-forming step to ~~both~~ provide the drive circuit and optically reflective coatings on the walls of the cavities.

20. (Currently Amended) A method as ~~claimed~~ in claim 24, wherein the substrate is plated with metal on an underside, and each cavity is formed through the full depth of the substrate body to expose the plating on the underside.

21. (Currently Amended) A method as ~~claimed~~ in ~~C~~claim 24, wherein the cavities are formed by drilling.

22. (Currently Amended) A method as ~~claimed~~ in ~~C~~claim 25, further comprising the ~~further~~ steps of applying a thermally conductive structure to the underside of the substrate.

23. (Currently Amended) A method as ~~claimed~~ in ~~C~~claim 28, wherein the thermally conductive structure is applied to the platings under the cavities and exposed substrate surfaces therebetween.

24. (Currently Amended) A method as ~~claimed~~ in claim 29, wherein an additional metal layer is applied to the platings before application of the thermally conductive structure.

25. (Currently Amended) A method as ~~claimed~~ in ~~C~~claim 29, wherein the thermally conductive structure comprises a layer of resin impregnated with thermally conductive particles.

26. (Currently Amended) A method as ~~claimed~~ in claim 31, wherein a heat sink is applied to said layer.

27. (Currently Amended) A method as ~~claimed~~ in ~~C~~claim 32, wherein the heat sink and the resin layer are applied with use of adhesives and pressing.

28. (Currently Amended) An illuminator as ~~claimed~~ in ~~C~~claim 16, wherein the ceramic material is Boron Nitride.

29. (Currently Amended) An illuminator as ~~claimed~~ in claim 7, wherein the electrically insulating body is of a circuit board material.

30. (Currently Amended) An illuminator as in claim ~~19~~ 29, wherein the electrically insulating body is of ~~FR4~~ flame resistant material.

31. (Currently Amended) An illuminator as in ~~C~~claim 7, wherein the plural conductors extend into the plural cavities, whereby said plural conductors act as reflective coatings on the plural cavity walls.

32. (Currently Amended) An illuminator as ~~claimed~~ in claim ~~21~~ 29, wherein the plural conductors extend underneath the light sources.

33. (Currently Amended) An illuminator as claimed in ~~C~~claim 7, wherein the plural light sources comprise bare semiconductor dies.